

WE CLAIM:

1. A method of providing home agent services, comprising the steps of:
providing a computing platform for receiving a plurality of packets from a first network;
implementing a plurality of home agents in software in said computing platform;
directing said packets within said computing platform to the home agent associated with
5 said packets;
processing said packets in said plurality of home agents; and
forwarding said packets from said computing platform onto a second network for
transmission to the destinations for said packets.
2. The method of claim 1, wherein each of said home agents comprise an instantiation of a
home agent software program implemented in said computing platform.
3. The method of claim 1, wherein said computing platform comprises a router.
4. The method of claim 1, wherein said computing platform comprises a general-purpose
computer.
5. The method of claim 1, wherein each of said home agents are assigned a unique IP
address.
6. A routing chassis processing packets for a plurality of mobile communications devices,

comprising:

an interface to a first network;

two or more software-replicated home agents; and

a means for demultiplexing a plurality of packets arriving from said first network at said first network interface and for forwarding said packets to said plurality of home agents in accordance with addresses contained in said packets.

7. The routing chassis of claim 6, further comprising two or more interfaces to a second network, each of said interfaces to said second network associated with one of said home agents.

8. The routing chassis of claim 6, wherein each of said home agents comprise an instantiation of a home agent software program.

9. The routing chassis of claim 6, wherein each of said home agents is assigned a unique IP address.

10. The routing chassis of claim 6, wherein each of said home agents processes registration request messages for a plurality of mobile devices.

11. The routing chassis of claim 6, wherein each of said home agents are associated with a virtual private network.

12. The routing chassis of claim 6, wherein said chassis is located on a local area network and wherein said local area network comprises an AAA server, said AAA server cooperating with said chassis in processing a registration request message from one of said wireless communications devices.

13. A method of handing a registration request from a mobile communications device, comprising the steps of:

providing a master home agent in a communications chassis, said master home agent comprising a plurality of software-replicated home agents;

receiving a registration request from said mobile communications device at said communications chassis and forwarding said registration request to one of a plurality of software-replicated home agents in said communications chassis in accordance with an address in said registration request;

generating a registration request authentication message in said one of said plurality of software replicated home agents;

transmitting said registration request authentication message from said communications chassis to an accounting, authentication, and authorization (AAA) server;

receiving a reply to said registration authentication message from said AAA server at said one of said plurality of software-replicated home agents; and

forwarding a reply to said registration request message from said communications chassis to said mobile communications device.